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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,254	07/18/2006	Ramprasad Soghal	NL040053	8357

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EXAMINER

CHERVINSKY, BORIS LEO

ART UNIT	PAPER NUMBER
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2835

MAIL DATE	DELIVERY MODE
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08/28/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/597,254	SOGHAL, RAMPRASAD	
	Examiner	Art Unit	
	Boris L. Chervinsky	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: the reference to claim 1 on Page 1, line 23 is improper, since claims can amended or canceled.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13, 15, 24, 26, 28, 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Regarding claim 32, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

4. Regarding claims 13, 15, 24, 28 the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

5. Claim 26 recites the limitation "said heater (8)" in line2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-6, 8-11, 12-31, 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Okayasu.

Okayasu discloses the system for cooling at least one electronic device 2, comprising at least one movable pumping element 8 for transporting a fluid to and/or from the device, the pumping element 8 is movable by heat; the pumping element 8 comprises the expandable and contractable diaphragm which is movable between at least a first position and a second position; cooling means 9, 14 for cooling the fluid comprise expansion means for expanding compressed fluid an expansion valve 11; the cooling means comprise a heat exchanger or a cooling rib (see Fig. 4) for transporting heat from the fluid to the environment; the compression chamber for compressing fluid, wherein the first side of the pumping element 8 abuts said compression chamber; the fluid supply 3 for supplying fluid from the compression chamber to the electronic device 2; the heat collector 1 for collecting heat from the device 2; the heat collector comprises a heat pipe 4 which is connected to the pumping element 8 for supplying heat to the pumping element 8; the heat collector comprises a fluid which is at least contained in the heat collection chamber P; the pumping chamber for pumping fluid from device, wherein the second side of said

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pumping element 8 abuts the pumping chamber P (claim 22); the pumping chamber P is fluid-connectable to the heat collection chamber 9, 14 (claim 23); the pumping chamber P is fluid-connectable to the compression chamber by means of the fluid connection 6, 10, 16 which comprises a one-way valve 5, 7, 11,12; at least one heater 1 for providing at least a part of the heat for moving said pumping element 8; the heater 1 is at least arranged to heat the content of the pumping chamber P (claim 26); valve means 5, 7, 11,12 are arranged to control the transport of the fluid (claim 27); at least a part of the valve means is arranged to cooperate with the pumping element 8 for controlling the transport of said fluid (claim 28); at least a part of the system is arranged to be mounted on or near an electronic device for cooling the device (claim 29); the pumping element 8 is arranged to

carry out a pumping movement under the influence of a heat-induced pressure rise (claim 30); the pumping element 8 is arranged to carry out a pumping movement when the temperature of the pumping element

changes (claim 31). The method steps of claims 1-11 are necessitated by the device structure as disclosed by Okayasu

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 7 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okayasu.

With respect to claim 7, Okayasu discloses the claimed invention except air as the cooling fluid. Air is well known and widely used as cooling media, therefore it would have been obvious at the time the invention was made to a person having ordinary skill in the art to use air as cooling fluid in the device disclosed by Okayasu as readily available media.

With respect to claim 32, Okayasu discloses the claimed invention except indicating it can be used for a computer or server. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the system as disclosed by Okayasu for a computing device since it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris L. Chervinsky whose telephone number is 571-272-2039. The examiner can normally be reached on 7-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayprakash N. Gandhi can be reached on 571-272-3740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Boris L. Chervinsky/
Primary Examiner, Art Unit 2835